



Name: \_\_\_\_\_  
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 Geometry, Period \_\_\_\_\_  
 Due Date: Mon, 4 Apr 2015

HW147 - mixed review

**Geometry  
Homework**

1)

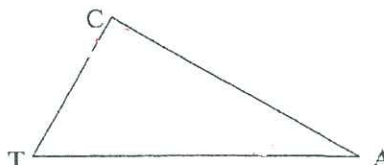
A landscaper planted 100 tulip bulbs, 150 daffodil bulbs, 200 crocus bulbs, and 350 hyacinth bulbs. What percent of the bulbs were crocus bulbs?

- A.  $12\frac{1}{2}\%$
- B.  $18\frac{3}{4}\%$
- C. 25%
- D.  $33\frac{1}{3}\%$
- E. 40%

$$\frac{\text{crocus}}{\text{total}} \times 100 = \%$$

2)

In right triangle CAT, angle T is 50 degrees. What is the tan A?

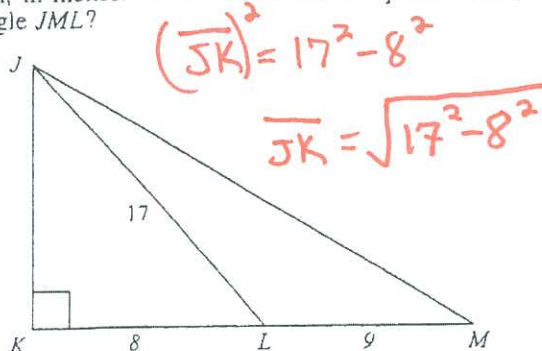


- a. 1.1917
- b. 0.8391
- c. 88.854
- d. 88.567

3)

In the figure below, the lengths of  $\overline{KL}$ ,  $\overline{JL}$ , and  $\overline{LM}$  are given, in inches. What is the area, in square inches, of triangle JML?

height

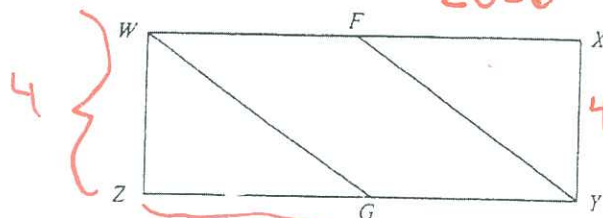


- A. 28.6
- B. 35
- C. 67.5
- D. 127.5
- E. 135

17 = base

4)

In the figure below, rectangle WXYZ has sides with length of 12 units and width of 4 units. Also, F and G are mid-points of  $\overline{WX}$  and  $\overline{YZ}$ , respectively. What is the perimeter, in units, of quadrilateral WFGY?



- A.  $8 + 6\sqrt{15}$
- B.  $12 + 4\sqrt{13}$
- C.  $12 + 4\sqrt{15}$
- D.  $16\sqrt{13}$
- E. 40

\* Find WG using P.T

5) You are buying a frozen yogurt cone. The yogurt store has three different types of cones, six different flavors, and eight kinds of toppings. Which expression should be used to quickly find how many types of yogurt cones you can buy?

- a.  $3 \times 6 \times 8$
- b.  $3 + 6 + 8$
- c.  $3 \times 6 + 8$
- d. none of the above

6)

Fill in the blanks in this sentence:

If you increase the lengths of the sides of a polygon by a factor of  $r$ , the perimeter will increase by a factor of \_\_\_\_\_ and the area will increase by a factor of \_\_\_\_\_.

- A.  $r^2$ ;  $r^3$
- B.  $r$ ;  $r^2$
- C.  $2r$ ;  $3r$
- D.  $r$ ;  $2r$

7)

Brian bought a pair of jeans for  $\frac{2}{3}$  of the original price of \$48.00 and a belt for 40% of its original price of \$12.50. Ignoring sales tax, what is the total amount of these purchases?

- F. \$21.00
- G. \$27.00
- H. \$30.00
- J. \$37.00
- K. \$60.50

8)

If  $\cos A = .2419$ , which measure is closest to the measure of angle A?

- a. 1 degree
- b. 76 degrees
- c. 14 degrees
- d. 13 degrees

9) Matthew is going to buy a car, either a Dodge or a Chevy. He is trying to decide whether to buy a minivan or a hatchback. How many choices does he have?

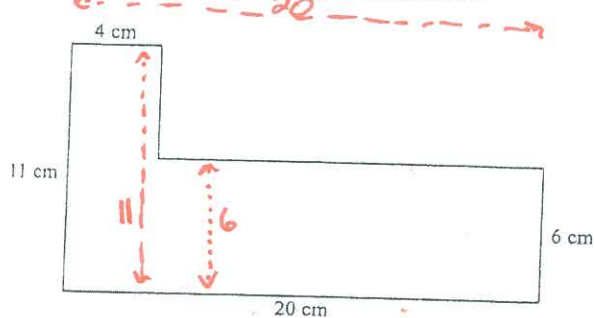
- a. 2
- b. 4
- c. 6
- d. 16

Dodge  
Chevy

Chevy

10)

For the polygon below, the lengths of 2 sides are not given. Each angle between adjacent sides measures  $90^\circ$ . What is the polygon's perimeter, in centimeters?

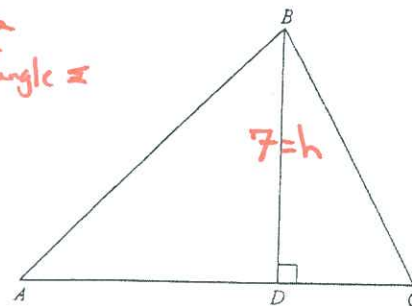


- F. 41
- G. 47
- H. 54
- J. 62
- K. 123

11)

The area of  $\triangle ABC$  below is 42 square inches. If  $\overline{BD}$  is 7 inches long, how long is  $\overline{AC}$ , in inches?

Area of Triangle =



- F. 9
- G. 10
- H. 12
- J. 15
- K. 21

12) The two rectangles below are similar.

How long is side B?

- A. 9 in
- B. 6.75 in
- C. 6 in
- D. 3.375 in

